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PHOENIX, ARIZONA



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SECOND DISTRICT
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THIRD DISTRICT
ED. TEN EYCK, DISTRICT ENGINEER
FOURTH DISTRICT
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J. L. DUNNE
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~~W. W. LANE~~
~~W. W. LANE~~
C. M. ZANDER
SUPT. OF EQUIPMENT

Sept. 29th, 1923.

Gov. Geo. W. P. Hunt.
State House.
Phoenix, Ariz.

Dear Sir:-

In compliance with instructions of Sept. 21st, I visited Holbrook and found that the main part of the flood had passed the town on the 19th and 20th, but the water was still running above normal when I reached Holbrook, Saturday morning the 22nd. The flood was caused by an almost incessant rain for about three days, which swelled all the tributaries of the Little Colorado and Puerco Rivers, both of which were at flood stage at the same time.

Owing to the fact that little or no protection work had been done along the river thru the town, and the soil being a very light silt and sand, when the high water struck the banks, the soil melted away in slabs varying from three to five feet at a time until nearly three hundred feet was destroyed at the worst place. Some twenty houses of various sizes, including seven homes were washed away at a total loss to the owners. The land loss is estimated at two blocks.

The steel Highway bridge, which was constructed by the County several years ago, was never in grave danger owing to the fact the the land just north of the north end of bridge is from three to four feet lower than the floor of the bridge, and the water run over the low section two feet deep.

A light, temporary protection of brush, rock and paige fence wire has been placed along the bank in the form of mats which will hold under ordinary water conditions, but if a permanent protection is provided it will need to be in the form of a heavy dyke of large slabs of stone placed to such a height that when floods do come down and the river scours under the dyke, the stones will settle until no further action is had from scour. This will necessitate heavy equipment and an expenditure of approximately

one hundred thousand dollars.

With the low taxable valuation of the County and Town it is not believed that the two can possibly finance such a project. However, a Committee was appointed at a mass meeting held by the citizens of Holbrook, and this committee immediately communicated with the management of the Santa Fe Railway Company, and Representative Carl Hayden. The former had General Manager Etter, Chief Engineer Ball together with local officials visit Holbrook, and Mr. Hayden was successful in securing an Engineer, Col. Herbert Deakne, of the War Department to inspect the conditions.

The Railway officials suggested that another 65ft span be added to the bridge before the protection work is done, and intimated this would be required before the Company would participate in the work. The Officials also stated that it would be necessary for the municipalities to ascertain definitely how much funds could be raised before they could take the matter up with the management.

Colonel Deakne was not in a position to make a statement as to what could or would be done by the Federal Government.

The bridge is on the transcontinental Highway, but is inside the corporate limits of the town of Holbrook, and is a light structure which will need to be rebuilt within a very few years in order to accomodate the traffic of present times.

From information gained thru conversation with citizens of the town, I am inclined to think that a Bond issue for protection work, if for a considerable sum, will not carry and I would recommend that official action on the matter be deferred until it is known just what the town and county can do.

Am enclosing herewith a map showing the damage, also the proposed protection work. A copy of same has been forwarded to the Chief Engineer of the Santa Fe, for such recommendations as to type and estimate of cost as he may suggest.

Enclosed are some photographs taken during the flood.

Respectfully submitted,

F. R. Goodman
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State Engineer.